

Instruction sheet (for free drainage systems)

Setting up: Fluff up the Growool to the density you want - by hand or a Growool 'cultivator'.

- The lower its density and the greater its height, the more air the Growool will hold.
- The container should be drained on the side at the bottom. Growool doesn't need a reservoir.
- Put the Growool lightly into the container. Pack it down gently, not heavily, and make up to at least 150 to 200 mm high. Install your irrigating system, usually drippers.

Wetting up: Initially wet with water, using the drippers if you wish. By hand, wet the remaining dry areas of the surface to fully use all the Growool volume and establish capillary action.

- It takes a large volume of water to fully wet the Growool, so keep watering to give plenty of run-off. You can use weak nutrient solution if you prefer. There will be an initial alkaline reaction.
- Before planting, irrigate with nutrient solution to displace most of the water. (Until run-off EC rises).
- After planting, irrigate with nutrient solution to run off every day.

Fertiliser: Ensure that you use a hydroponic fertiliser, not a 'complete' fertiliser such as 'Aquasol'.

- · Concentrated liquid fertilisers come as two parts 'A' and 'B'. Use equal volumes of each.
- Dissolve single part solid fertiliser only at working strength, not as a concentrated solution.
- Fertilisers containing iron (Fe) as EDDHA chelate reduce the influence of pH.

<u>Feeding:</u> The most important management tools are, firstly an EC (electrical conductivity) meter, followed by a pH meter, or cheaper pH indicator papers or indicator solutions.

- The most important technique of control is to make certain that you have some run off every day.
- How much nutrient solution feed is used by the plants each day depends mainly upon the total
 amount of light received that day. It is also influenced by the air temperature and relative humidity.
- Usage also depends upon the size of the plants. The bigger the plant the more it takes up.
- It is best to feed 'little and often', initially 3 times per day, then rising to perhaps 6 8 per day if your system can do this. Stop feeding at least 2 hours before sunset, to increase Growool aeration overnight.
- The feed should be at an EC to suit your crop, usually an EC of about 1.5 to 2.0 mS/cm and a pH of 5.5 to 6.0. Never go below 5.0 pH.
- In warmer conditions the plants take up relatively more water (to cool their leaves by evaporation) than nutrient. This results in the EC of the run-off solution being higher than the feed.
- If this EC rise is more than one quarter of the feed strength, then it can be controlled by increasing amount of run off, or reducing the EC of your feed solution.
- If you need to flush, make certain that you follow up with plenty of nutrient feed solution.

Flowering: If you grow plants which flower, you will need to change the fertiliser you use.

- Until budding starts use a 'vegetative' fertiliser.
- Once budding has started change to a 'bloom' or 'flowering' fertiliser for the remainder of the crop.
- Note that the fertiliser is following the change in uptake by the plant. It is not initiating budding.